Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the above-identified application:

Listing of Claims:

1-102. (Cancelled)

103. (Currently Amended) The apparatus of claim [[102]] 117, wherein the at least one type of radiant energy is selected from the group consisting of optical, Deep Ultra Violet, X-ray, electron, proton, and particle beam.

104. (Currently Amended) The apparatus of claim [[102]] 117, wherein the exposure elements are miniature sources of at least one of the following types of radiant energy: X-ray, Deep Ultra Violet, and electron.

105. (Currently Amended) The apparatus of claim [[102]] 117, wherein the exposure elements control passage of radiant energy from an external source.

106. (Previously Presented) The apparatus of claim 105, wherein the exposure elements control passage of radiant energy from an external source using at least one of the following mechanisms: electromagnetic deflection, electrostatic deflection and mechanical shuttering.

107. (Currently Amended) The apparatus of claim [[102]] 117, comprising means for separately focusing radiant energy emitted from each of multiple different exposure elements.

108. (Currently Amended) The apparatus of claim [[102]] 117, comprising means for:

ceasing irradiating the surface;

shifting the exposure elements with respect to the surface; and

resuming irradiating the surface.

109-116. (Canceled)

117. (Previously Presented) An apparatus for forming a patterned layer during manufacture of an integrated circuit, comprising:

an elastic integrated circuit;

a plurality of exposure elements;

means for selectively irradiating with at least one type of radiant energy portions of a surface of a layer by electronically controlling individually each of the exposure elements; and

at least one stress-controlled dielectric layer.

118. (Previously Presented) The apparatus of claim 117, wherein the stress of the at least one stress-controlled dielectric layer is less than about 8×10^8 dynes/cm^2.

119. (Currently Amended) The apparatus of claim [[102]] 117, further comprising at least one elastic dielectric layer.

120. (Previously Presented) An apparatus for forming a patterned layer during manufacture of an integrated circuit, comprising:

an elastic integrated circuit;

a plurality of exposure elements;

means for selectively irradiating with at least one type of radiant energy portions of a surface of a layer by electronically controlling individually each of the exposure elements; and

at least one elastic dielectric layer, wherein the stress of the at least one elastic dielectric layer is less than about 8×10^8 dynes/cm^2.

121-137. (Canceled)

138. (Previously Presented) An apparatus for forming a patterned layer during manufacture of an integrated circuit, comprising:

an elastic integrated circuit;

a plurality of exposure elements; and

means for selectively irradiating with at least one type of radiant energy portions of a surface of a layer by electronically controlling individually each of the exposure elements, wherein said plurality of exposure elements are formed on a substrate, said apparatus further comprising a stress-controlled dielectric layer formed at least one of over and on the substrate.

139. (Previously Presented) The apparatus of claim 138, wherein the at least one type of radiant energy is selected from the group consisting of optical, Deep Ultra Violet, X-ray, electron, proton, and particle beam.

140. (Previously Presented) The apparatus of claim 138, wherein the exposure elements are miniature sources of at least one of the following types of radiant energy: X-ray, Deep Ultra Violet, and electron.

141. (Previously Presented) The apparatus of claim 138, wherein the exposure elements control passage of radiant energy from an external source.

142. (Previously Presented) The apparatus of claim 141, wherein the exposure elements control passage of radiant energy from an external source using at least one of the following mechanisms: electromagnetic deflection, electrostatic deflection and mechanical shuttering.

143. (Previously Presented) The apparatus of claim 138, comprising means for separately focusing radiant energy emitted from each of multiple different exposure elements.

144. (Previously Presented) The apparatus of claim 138, comprising means for:

ceasing irradiating the surface;

shifting the exposure elements with respect to the surface; and

resuming irradiating the surface.

145. (Previously Presented) The apparatus of claim 138, wherein the stress of the at least one stress-controlled dielectric layer is less than about 8×10^8 dynes/cm^2.

146. (Previously Presented) The apparatus of claim 138, further comprising at least one elastic dielectric layer.

147. (Previously Presented) The apparatus of claim 146, wherein the stress of the at least one elastic dielectric layer is less than about 8×10^8 dynes/cm^2.

148-182. (Canceled)

183. (Currently Amended) The apparatus of claim [[102]] 117, wherein the plurality of exposure elements includes at least one million elements.

184. (Previously Presented) The apparatus of claim 118, wherein the stress is tensile.

185. (Previously Presented) The apparatus of claim 120, wherein the stress is tensile.

186. (Previously Presented) The apparatus of claim 117, wherein the stress of the at least one stress-controlled dielectric layer is 2 to 100 times less than the fracture strength of the at least one stress-controlled dielectric layer.

187. (Previously Presented) The apparatus of claim 186, wherein the stress is tensile.

188. (Previously Presented) The apparatus of claim 117, wherein the at least one stress-controlled dielectric layer is at least one of elastic and flexible.

189. (Previously Presented) The apparatus of claim 117, wherein the at least one stress-controlled dielectric layer is capable of forming at least one of a flexible membrane and a free standing membrane.

190. (Previously Presented) The apparatus of claim 117, wherein the at least one stress-controlled dielectric layer is selected from the group consisting of oxides of silicon, nitrides of silicon, silicon dioxide and silicon nitride.

191. (Previously Presented) The apparatus of claim 117, further comprising a plurality of interconnect conductors formed within the at least one stress-controlled dielectric layer.

192. (Previously Presented) The apparatus of claim 117, wherein the at least one stress-controlled dielectric layer is formed by at least one of Plasma Enhanced Chemical Vapor Deposition and multiple RF energy sources.

193. (Previously Presented) The apparatus of claim 117, wherein the at least one stress-controlled dielectric layer is formed at a temperature of about 400°C.

194-215. (Canceled)

216. (Previously Presented) The apparatus of claim 138, wherein the plurality of exposure elements includes at least one million elements.

217. (Previously Presented) The apparatus of claim 145, wherein the stress is tensile.

218. (Previously Presented) The apparatus of claim 147, wherein the stress is tensile.

219. (Previously Presented) The apparatus of claim 138, wherein the stress of the at least one stress-controlled dielectric layer is 2 to 100 times less than the fracture strength of the at least one stress-controlled dielectric layer.

220. (Previously Presented) The apparatus of claim 219, wherein the stress is tensile.

221. (Previously Presented) The apparatus of claim 138, wherein the at least one stress-controlled dielectric layer is at least one of elastic and flexible.

222. (Previously Presented) The apparatus of claim 138, wherein the at least one stress-controlled dielectric layer is capable of forming at least one of a flexible membrane and a free standing membrane.

223. (Previously Presented) The apparatus of claim 138, wherein the at least one stress-controlled dielectric layer is selected from the group consisting of oxides of silicon, nitrides of silicon, silicon dioxide and silicon nitride.

224. (Previously Presented) The apparatus of claim 138, further comprising a plurality of interconnect conductors formed within the at least one stress-controlled dielectric layer.

225. (Previously Presented) The apparatus of claim 138, wherein the at least one stress-controlled dielectric layer is formed by at least one of Plasma Enhanced Chemical Vapor Deposition and multiple RF energy sources.

226. (Previously Presented) The apparatus of claim 138, wherein the at least one stress-controlled dielectric layer is formed at a temperature of about 400°C.